Chronic Disease Indicators: Indicator Definition



Recommended physical activity among youth

Category: Physical Activity and Nutrition

Demographic Group: Students in grades 9–12.

Numerator: Respondents in grades 9–12 who report doing any kind of physical activity that increased their heart

rate and made them breathe hard some of the time for a total of at least 60 minutes/day on 5 or more

days during the 7 days before the survey.

Denominator: Respondents in grades 9–12 who report doing any kind of physical activity that increased their

heart rate and made them breathe hard some of the time for a total of at least 60 minutes/day on 0

or more days during the 7 days before the survey.

Measures of Frequency: Annual prevalence with 95% confidence interval.

Time Period of Case

Definition:

Previous 7 days.

Background: In 2005, a total of 36% of students in grades 9–12 did any kind of physical activity that increased their

heart rate and made them breathe hard some of the time for a total of at least 60 minutes/day on 5 or more days during the 7 days before the survey. The prevalence of doing any kind of physical activity that increased their heart rate and made them breathe hard some of the time for a total of at least 60 minutes/day on 5 or more days during the 7 days before the survey is higher among male students than among female students. The 2005 Dietary Guidelines recommend that children and adolescents participate in at least 60 minutes of moderate intensity physical activity most days of the week, preferably daily. Recently updated guidelines for physical activity among Americans are available at:

http://www.health.gov/paguidelines/.

Significance: Physical inactivity and unhealthy eating contribute to obesity and a number of chronic diseases,

including some cancers, cardiovascular disease, and diabetes. Physical activity reduces the risk for heart disease, stroke, type 2 diabetes and its complications, overweight, and osteoporosis. Physical activity is also associated with a decreased risk of colon and breast cancer, although whether this is a causal link has yet to be firmly established. Physical activity patterns established during adolescence might extend

into adulthood and affect future chronic disease risk.

Limitations of Indicator: The indicator may not be measuring the accurate amount of physical activity because the respondent

must calculate each day's activities and then sum across the week. Also, the indicator does not account for the metabolic and physiologic needs of growing children, which may vary according to intensity of exercise, type of exercise performed, and body type. Research studies have started to address such issues and support the benefits of exercise, especially aerobic exercise for children and teens, along with proper nutrition in preventing the development of obesity. This new indicator does

conform to the 2005 Dietary Guidelines.

Data Resources: Youth Risk Behavior Surveillance System (YRBSS).

http://www.cdc.gov/yrbss/

Limitations of Data

Resources:

As with all self-reported sample surveys, YRBSS data might be subject to systematic error resulting from noncoverage (e.g., no participation by certain schools), nonresponse (e.g., refusal to participate in the survey or to answer specific questions), or measurement (e.g., social desirability or recall bias). The YRBSS question upon which this indicator is based was introduced in 2005. In the 2005 YRBSS questionnaire, this questions was preceded by two others, one asking about vigorous physical activity and the other asking about moderate physical activity. In the 2007 YRBSS questionnaire, those two additional preceding questions were removed. Some state and local districts noticed an increase in this indicator between 2005 and 2007, which may be due in part to the effect of removing these two additional questions.

Healthy People 2010 Objectives:

22-7: Increase the proportion of adolescents who engage in vigorous physical activity that promotes cardiorespiratory fitness >=3 days/week for >=20 minutes/occasion.